CLAIMS:

1. A distributed fabrication system for creating, while promoting strategic alignment between information technology departments and business units' objectives, a business application compatible with XInternet technologies via a communication network, the fabrication system comprising:

a client workstation connectable to the communication network, the workstation having a browser interface;

a software factory displayed in the browser interface through which a user fabricates the business application in response to business need specifications, the software factory being displayed in the browser interface from factory building files, the software factory comprising:

a first tool for defining a solution containing the business application, the first tool comprising components for entering solution parameters;

a second tool for constructing the solution using business models in relation with the solution parameters, the second tool comprising components for designing basic characteristics of the solution and a business domain model of the business application having a main entity and related entities, the main entity establishing relationships with the related entities, the main entity and the related entities having attributes and actions, the second tool also comprising components for designing a menu of the business application, specific functions of the business application, and functional descriptions of the business application;

a third tool for validating the solution, the third tool comprising components for previewing the solution by automatically generating a working prototype of the business application using dynamic database simulation means for testing the working prototype of the business application and communication components for feedback messages between users testing the working prototype of the business application and users constructing the solution; and

a fourth tool for generating code forming an initial and operational version of the business application to be supplied as a normalized input to a regular desktop development system; and

a web server connectable to the communication network, the web server providing the factory building files and controlling the software factory displayed in the browser interface of the workstation.

2. The distributed fabrication system according to claim 1, wherein the first, the second, the third and the fourth tools of the software factory use a business model to assist with creation of the business application to isolate business application definitions from implementation of the business application on any specific technology platform.

3. The distributed fabrication system according to claim 1, wherein the first tool further comprises importing means for importing a business object and data model for constructing the solution and to design the basic characteristics of the solution, the application business domain model, the application specific functions, and the application functional descriptions.

4. The distributed fabrication system according to claim 1, wherein the code forming the business application comprises an applicative framework supplying a generic dynamically adaptable N-Tier client-server · object-oriented applicative infrastructure constructed on top of a third party software system infrastructure to support the business application, the third party software system infrastructure being complemented by database management system components.

5. The distributed fabrication system according to claim 4, wherein the applicative framework comprises generic adaptable software structures for the creation of the business application on any specific technology platform using a web server, a business server and a database server on which the business application is fabricated, developed, tested and deployed, the applicative framework also comprising:

user services for managing a business application user interface, relying on a XInternet one web page application pattern, on a workstation having a browser interface to access the business application from the web server on which business application web services are deployed, the business application user interface being a dynamic web page avoiding web page transitions for user experience, the user services comprising one web page application components library for displaying the business application user interface on said browser interface and for communicating between the business application user interface displayed in said browser interface and the business application web services deployed on the web server, the one web page application components library providing bi-directional communications between said workstation and said web server;

business services for managing business application logic and communications between the business application web services, the applicative framework and the third party software system infrastructure, the business services being implemented on the business server, the business services comprising generic adaptable components having interface application components, core application components, utility application components and task application components; the generic components being used to insure code reusability, adaptability, uniformity, isolation, stability, robustness, scalability and performance; and

data services for managing business application data access logic and communications between the business services and the third party database management system components on the database server upon request of the business server on which the business services are implemented, the data services comprising generic adaptable database access components having database scripts to automatically assist the creation of application database tables and stored procedures required to access and manage application data on the database server.

6. The distributed fabrication system according to claim 5, wherein the code generated by the fourth tool comprise an approved, operational and well-formed

solution comprising the applicative framework specified from business application definitions to be supplied as a normalized input to a regular desktop development system.

7. The distributed fabrication system according to claim 1, wherein the first tool also comprises security components to define security for business users and information technology experts access rights and roles to the solution.

8. The distributed fabrication system according to claim 1, wherein the second tool comprises web services to define and connect application domain entities and the third tool comprises web services to preview, test, validate and interact with application domain objects and object links.

9. The distributed fabrication system according to claim 8, wherein the dynamic database simulation means for testing the working prototype of the business application comprise an XML document simulating an application database, the XML document being used to add, delete and modify the application domain objects and object links.

10. The distributed fabrication system according to claim 1, wherein the database simulation means for testing the working prototype of the business application comprise object operation means for adding objects in a simulated database, modifying the objects in the simulated database, deleting the objects from the simulated database and finding, adding, modifying and deleting links between the objects, the object operation means being used for testing the main entity objects of the application, the related-entities objects of the application, the menu of the application, the specific functions of the application and the functional descriptions of the application.

11. The distributed fabrication system according to claim 1,

further comprising a database server connectable to the communication network,

wherein the communication components for feedback messages between the users testing the working prototype of the business application and the user constructing the solution comprise collaborative functions means for providing a collaboration center with the feedback messages centralized on the database server.

12. The distributed fabrication system according to claim 1, wherein the factory building files are selected from a group consisting of HTML files, ASPx files, DHTML components files, programs files, assemblies files, components files, XML Documents files and Web Services files accessed from HTTP,S and SOAP protocols.

13. The distributed fabrication system according to claim 1, wherein the third tool further comprises components for automatically generating a functional document of the solution.

14. The distributed fabrication system according to claim 1, wherein the solution comprises a plurality of the business application.

15. The distributed fabrication system according to claim 1, wherein the testing of the working prototype of the business application allows to determine a state of operability and profitability of the solution by following a project go/no go type workflow to reduce cost and time for project approval.

16. An applicative framework system supplying a generic dynamically adaptable N-Tier client-server object-oriented applicative infrastructure constructed on top of a third party software system infrastructure to support a business application compatible with XInternet technologies via a communication network, the third party software system infrastructure being complemented by database management system components, the applicative framework system comprising:

a client workstation connectable to the communication network, the workstation having a browser interface;

a web server connectable to the communication network;

a business server connectable to the communication network;

a database server connectable to the communication network; and

an applicative framework comprising generic adaptable software structures for the creation of the business application on any specific technology platform using the web server, the business server and the database server on which the business application is fabricated, developed, tested and deployed, the applicative framework also comprising:

user services for managing a business application user interface, relying on a XInternet one web page application pattern, on a workstation having a browser interface to access the business application from the web server on which business application web services are deployed, the business application user interface being a dynamic web page avoiding web page transitions for user experience, the user services comprising one web page application components library for displaying the business application user interface on said browser interface and for communicating between the business application user interface displayed in said browser interface and the business application web services deployed on the web server, the one web page application components library providing bi-directional communications between said workstation and said web server;

business services for managing business application logic and communications between the business application web services, the business services being implemented on the business server, the applicative framework and system components of the third party software system infrastructure, the business services comprising generic adaptable components having interface application components, core application components, utility application components and task application components being used to insure code reusability, adaptability, uniformity, isolation, stability, robustness, scalability and performance; and

data services for managing business application data access logic and communications between the business services and the third party database management system components on the database server upon

request of the business server on which the business services are implemented, the data services comprising generic adaptable database access components having database scripts to automatically assist the creation of application database tables and stored procedures required to access and manage application data on the database server.

17. The applicative framework system according to claim 16, wherein the third party software system infrastructure comprises a MICROSOFT .NET framework and COM+ service components.

18. The applicative framework system according to claim 16, wherein the interface application components comprise function means for performing the following operations to help create a normalized data model:

creating, inserting, updating and deleting main objects;

creating, inserting, updating and deleting main object related objects;

creating, inserting, updating and deleting main object links to the related objects;

finding a list of the main objects;

selecting in the list one of the main objects;

creating, inserting, updating and deleting main object operations;

creating, inserting, updating and deleting main object related object operations;

creating, inserting, updating and deleting object de-normalized views; and

creating, inserting, updating and deleting application menus.

19. The applicative framework system according to claim 16, wherein the core application components comprise function means for performing the following operations:

managing business application workflow and handling business application architectural aspects, the architectural aspects transaction management, error management and diagnostic management;

implementing business application tasks and rules;

managing data services workflow and handling specific database transactions; and

implementing database connections.

20. The applicative framework system according to claim 16, wherein the utility application components comprise an exception manager to manage warnings and errors, a diagnostic manager to diagnose the business application and to recover from errors, an email manager to handle electronic communications, a report manager to produce reports, configuration files to replace old registry settings, and common functions means to provide basic reusable functions.

21. The applicative framework system according to claim 16, wherein the task application components comprise a security manager to manage access rights validations to the business application and a reference data manager supporting generic or specific reference table data models.

22. A distributed software fabrication process for creating, while promoting strategic alignment between information technologies departments and business units objectives, a business application compatible with XInternet technologies via a communication network, the software fabrication process comprising the steps of:

displaying a software factory through a browser interface of a client workstation connectable to the communication network, the software factory allowing a user to fabricate the business application in response to business need specifications, the software factory being displayed in the browser interface from factory building files;

providing the factory building files from a web server to the client workstation and controlling the software factory displayed in the browser interface of the client workstation;

defining a solution containing the business application via the software factory, the software factory comprising a first tool having components for entering solution parameters;

constructing the solution using business models in relation with the solution parameters via the software factory, the software factory comprising a second tool having components for designing basic characteristics of the solution and a business domain model of the business application having a main entity and related entities, the main entity establishing relationships with the related entities, the main entity and the related entities having attributes and actions, the second tool also comprising components for designing a menu of the business application, specific functions of the business application, and functional descriptions of the business application;

validating the solution via the software factory, the software factory comprising a third tool having components for previewing the solution by automatically generating a working prototype of the business application using dynamic database simulation means for testing the working prototype of the business application and communication components for feedback messages between users testing the working prototype of the business application and users constructing the solution;

determining a state of operability and profitability of the solution by following a project go/no go type workflow to reduce cost and time for project definition and approval and to improve strategic alignment between information technologies and business units objectives; and

generating code via the software factory to form an initial and operational version of the business application to be supplied as a normalized input to a regular desktop development system, the code forming the business application comprising an applicative framework supplying a generic dynamically adaptable N-Tier client-server object-oriented applicative infrastructure constructed on top of a third party software system infrastructure to support the business application on any specific technology platform.

23. The distributed fabrication system according to claim 1, wherein the browser interface is a container controller.

24. The applicative framework system according to claim 16, wherein the browser interface is a container controller.

25. A distributed software fabrication process according to claim 22, wherein the browser interface is a container controller.